

8 吋全自動表面輪廓儀

Measurement

◆ Roughness

Parameter	Description
Average (R_a)	This is the arithmetic average deviation of the absolute values of the roughness profile from the mean line or centerline. Also known as <i>centerline average roughness</i> . The centerline divides profiles such that all areas above it are equal to all areas below it. (ANSI)
Maximum R_a (Max R_a)	The trace within the cursors is divided into nineteen overlapping sections. Each section is one-tenth of the sampling length. The R_a of each section is calculated, and the maximum is displayed. (ANSI)
RMS (R_q)	The Root-Mean-Square (RMS) or geometric average deviation of the roughness profile from the mean line measured in the sampling length. (ANSI)
Peak (R_p)	The distance between the mean line and the highest peak within the sampling length. (ANSI)
Valley (R_v)	The distance between the mean line and the lowest valley within the sampling length. (ANSI)
Peak/Valley (R_t)	The vertical distance between the highest peak and the lowest valley in the sampling length leveled on the mean line. (Also known as R_{Tmax} , R_y , Maximum Peak-to-Valley Roughness.) (ANSI)
Height 10pt (R_z)	The average height difference between the five highest peaks and the five deepest valleys within the cursors measured from a line parallel to the mean line. (ANSI)
Height 6pt (R_{3z})	The average height difference between the three highest peaks and the three deepest valleys in the sampling length measured from a line parallel to the mean line and not crossing the profile. (ANSI)

Profiling Performance

- ◆ Scan Length: 1 μ m to 5mm
- ◆ Scan Speed: 2 μ m/s to 25mm/s
- ◆ Sampling Rate: 5 to 2000 Hz
- ◆ Vertical Range: $\pm 13 \mu\text{m} / 0.0078 \text{ \AA}$
 $\pm 65 \mu\text{m} / 0.0391 \text{ \AA}$, $\pm 327 \mu\text{m} / 0.1953 \text{ \AA}$
- ◆ Vertical Linearity: 10 \AA
- ◆ Horizontal Resolution 0.1 μ m @ 1 μ m/s scan speed
- ◆ Maximum Sample Size: 254 x 254 mm